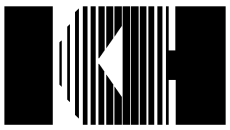

Kaiser-Hill

PROJECT BASELINE DESCRIPTION

Engineering, Environmental, Safety & Quality Programs Project

Rocky Flats Environmental Technology Site Closure Project

June 30, 2000

Approved:

Project Manager	**date**

Contents

PROJECT BASELINE

The Engineering, Environmental, Safety and Quality Programs (EES&QP) organization is responsible for the overall engineering, safety and occupational medicine, environmental stewardship, quality, Radiation protection, nuclear and criticality safety, independent safety oversight, and training programs that are required to close the Site.

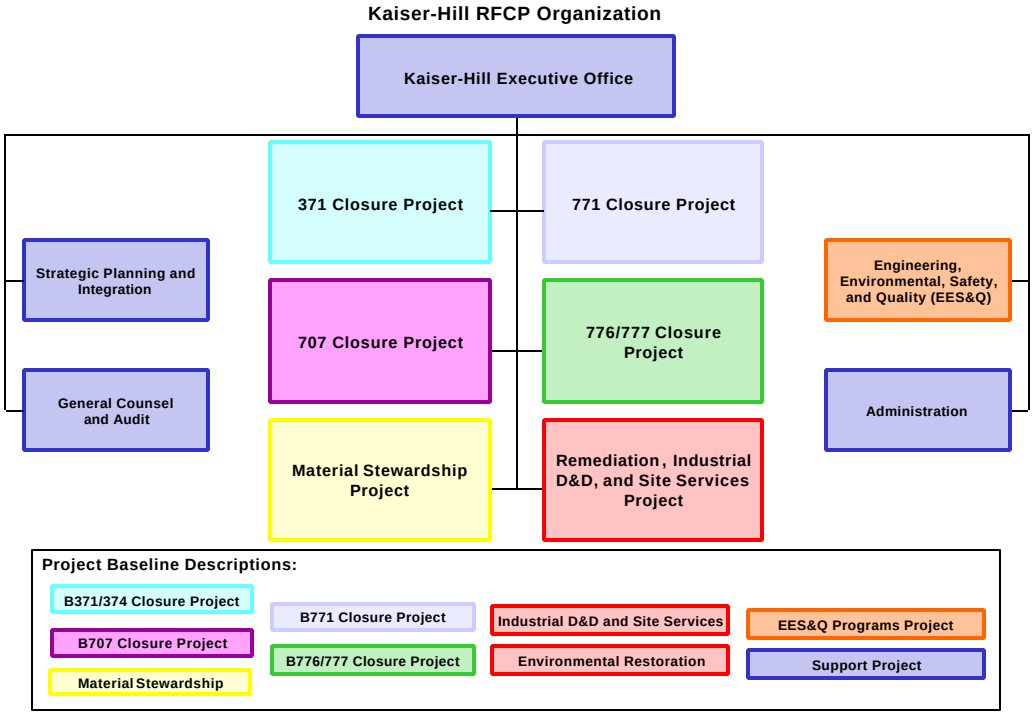

Figure 1: Kaiser-Hill RFCP Organization

1. Scope

The scope of the EES&QP Project includes the programmatic infrastructure for all the Closure Projects and meets a significant number of the requirements in sections of the Kaiser-Hill Contract, Section C, Technical Exhibit A. A number of the sections have direct requirements for the functions in the EES&QP Project. In other cases, such as Project completion meeting the requirements in the RFCP, this Project has the oversight to ensure the requirements are met although the work will be performed in the facility Closure Projects.

The scope for each of the 11 cost accounts that are included in the EES&QP Project follows.

1.1 HAA - PROJECT MANAGEMENT

This account provides overall management of the EES&QP Project, including direction, staffing, and supervision of assigned programs. The administration of Project cost controls is also included in this cost account. In addition, technical and conduct of operation assistance is provided to all Projects. Representatives are assigned to facilities to provide oversight through observations, inspections, and assessments; to evaluate compliance with requirements; and to recommend corrective actions and assist in implementation. The continuing improvement element of the Integrated Safety Management (ISM) process is implemented through this assistance function.

1.2 HAB - SAFETY

The Site's overall management and direction of the Occupational Safety and Industrial Hygiene (OS/IH) program is included in this cost account. The OS/IH activities include: management and maintenance of the Site OS/IH manual, collecting and reporting safety related data, proposing corrective actions to negative safety trends, oversight of OS/IH in facility Projects, supporting the Emergency Preparedness program with qualified OS/IH professionals, providing specific OS/IH input to worker training programs, evaluating subcontractor OS/IH programs for adequacy, and managing the safety award program.

A lessons learned program is also included to evaluate and communicate information, from both onsite and offsite events, to the facility Projects. The function provides information to the facility Projects as part of the ISM continual improvement element.

This cost account also includes the oversight management of the Site's Health Programs/Ambulatory Care function and the costs associated with occupational medicine including: clinical services, emergency response support, employee assistance program, respirator training and fit program, and emergency services for injuries, illnesses or contamination events. These services are provided to all Site employees including the DOE, RFFO. Medical records are prepared and maintained as part of this function.

The management and operation of the Beryllium Health Surveillance Program for onsite current employees is also included in this cost account. The activities include testing to identify if a person has been sensitized to beryllium using lymphocyte proliferation and chest x-rays. Annual follow-up exams are also included for current workers who are sensitized to beryllium or have chronic beryllium disease. The program is mandatory for all workers designated as beryllium workers or incidental beryllium workers.

The Joint Company Union Safety Committee (JCUSC) for the resolution of employee safety concerns is included in this cost account. The JCUSC is required by the Kaiser-Hill/United Steelworkers of America Labor Agreement to investigate, resolve, and verify safety issues that are brought to the attention of the committee for action. Funding for union membership in the committee is included in this activity.

1.3 HAC - INDEPENDENT SAFETY OVERSIGHT AND QUALITY ASSURANCE

The Site's overall programmatic management and direction of the Independent Safety Oversight, Site Corrective Action Tracking System, Site Quality Assurance Program, and the Price Anderson Amendments Act (PAAA)/Occurrence Reporting/ Event Investigation functions are included in this cost account.

The Independent Safety Oversight (ISO) activity includes: the development and maintenance of oversight procedures, providing a dedicated oversight team to each of the facility Projects, conducting independent assessments, performing common cause analysis of events, performing issues evaluations, and conducting readiness determinations for the start and restart of nuclear facilities.

The Site Corrective Action Tracking System activity is the Site's tracking database for corrective actions and commitments. This database is known as the Plant Action Tracking System (PATS). This cost account includes overall management, computer program upgrades, and periodic reports of completed, future, and overdue commitments.

The Quality Assurance Policy and Program activity provides the Site-level QA policy and the single point of contact with the regulators and customers on QA issues. Quality audits are performed to evaluate and review activities to assure compliance with regulations, identify improvements, and evaluate performance.

The PAAA / Occurrence Reporting / Event Investigation activity provides and maintains the Site-level implementing procedure for the Occurrence Reporting Program to ensure proper categorization, notification, reporting, and investigation of events and/or conditions meeting reportable criteria per requirements. The activity also provides oversight to verify compliance and identify any improvements. Training of occurrence reporting personnel is also included. The PAAA activity monitors QA, radiological controls, and nuclear safety performance; compares them to standards; and screens deficiencies for non-compliance tracking system reporting. The PAAA function provides the overall procedure and the Site's central point-of-contact for PAAA issues and the verification of corrective actions.

1.4 HAD - ENVIRONMENTAL MEDIA MANAGEMENT

The Site's overall programmatic management and direction of the Environmental Media Management, Actinide Migration Evaluation/ Water Balance, Rocky Flats Cleanup Agreement (RFCA) Implementation and Oversight, and Program Offsite Site Dose Calculations functions are included in this cost account.

The Environmental Media Management activity provides: project direction to the Site's water and air monitoring programs, oversight of Projects to ensure RFCA commitments are being achieved, collection of environmental data, establishment and interface with independent environmental review organizations, and an interface with stakeholder meetings and external agencies.

The activities in Actinide Migration include: Air Dispersion Modeling, Erosion and Sediment Transport Modeling, Pathway Analyses Reporting, Actinide Lab Studies, Wetlands Evaluation and Advisory Panel / Peer Review/Stakeholder Meetings. The results of these activities will be included in the Interim Corrective Action Decision / Record of Decision, future remediation alternative analysis, and the Comprehensive Risk Assessment.

The ICP/MS Uranium Analysis activity is a special project for the Colorado Department of Public Health and Environment (CDPHE) to analyze U234, U235, U236, and U238 isotopes with sufficient precision and accuracy to distinguish naturally occurring uranium from that introduced by Site activities. It will also provide environmental information related to the use of reactor recycle material (which would be the only source for U236) on the Site.

The activities in RFCA Implementation & Oversight include: developing, promoting, and maintaining regulatory relations, processes, strategies, and communications that optimize the Site's ability to accomplish closure. RFCA Implementation includes: preparation of documents, guidance, training, and briefings to appropriate organizations and personnel. Also included in this activity are water strategy and radiological soil action levels tasks.

Also included in Environmental Media Management are: Closure Strategy, groundwater monitoring, well installation/replacement, surface water monitoring, clean water act compliance support, effluent air monitoring, ambient air monitoring, meteorology monitoring, and the data analysis and reporting of these activities.

Environmental support is also provided to the Site's Emergency Preparedness through a functional work center and Hazard Assessment Center representation.

1.5 HAE - TRAINING

The overall management and direction for the Kaiser-Hill Training function is included in this cost account. Activities include: establishing and maintaining Site policy and guidance for both classroom and on-the-job training, providing Site-level formal training, assisting the facility Projects in establishing and maintaining Project training programs, and managing special training projects such as mock-up training for D&D workers.

1.6 HAF - NUCLEAR SAFETY & LICENSING

Kaiser-Hill Nuclear Safety and Licensing provides the overall Site programmatic requirements for Nuclear Safety, Criticality Safety, Independent Safety Review, and Standards (directive) Management. The interface between the Project organizations and the DOE regulatory function is centralized and managed within the Nuclear Safety and Licensing organization. The Nuclear Safety and Licensing organization provides a single point-of-contact (POC) between K-H and DOE for all nuclear regulatory communications. This communication includes DOE technical direction related to methods of compliance, for example, the format and content of nuclear facility TSRs. This activity also provides internal licensing integration between the individual Project organizations.

The Criticality Safety Engineers report to the Criticality Safety Manager, but are matrixed to individual Projects. This is necessary to meet a DOE Order requirement to keep the Criticality Safety Engineers separate from line management. This ensures independence, and reduces the potential for the appearance that the Project organizations are "influencing" Criticality Safety decisions. Under this arrangement, the Criticality Safety Manager is responsible for providing qualified Criticality Safety support to the Project organizations. The activity is responsible for prioritizing the Criticality Engineer's workload, and provides day-to-day direction to meet Project needs. The facility Projects provide the resources for their criticality safety support while this activity provides resources for the procedures, certification, and management.

The Independent Safety Review (ISR) activity, in the form of the Site Operational Review Committee/ Project Review Committee (ORC/PRC) Chair, is also part of this cost account. The ISR function establishes and maintains independent safety review requirements for the Site, and runs the Site ORC/PRC for issues that cross Project boundaries.

The Authorization Agreement/Standards Management/DNFSB activity provides the three following functions: (1) Maintenance of Authorization Agreements (AAs) and includes revision and generation of new AAs, as required. (2) The Standards Management function is the single point of contact with DOE for any modification of DOE directives in the K-H contract. All exemption and waiver requests are coordinated within this activity. The Standards activity also maintains the directive owner list that maps the DOE directives to a responsible manager within

K-H. (3) The Defense Nuclear Facilities Safety Board (DNFSB) activity assures that commitments are captured and that accurate information is entered into the Major External Milestones and Commitments database and completed. This activity also responds to request for about 800 documents per year from the DNFSB staff and provides a tracking system of delivered documents. The activity coordinates all DNFSB visits and provides a weekly summary of DNFSB publications that relate to the Site.

1.7 HAG - ENGINEERING

The Site's overall programmatic management and direction of the K-H Engineering Programs, Engineering Records, Integrated Safety Management/Integrated Work Control Project (ISM/IWCP) Program administration, and Fire Protection Engineering are included in this cost account.

The Engineering Programs activity includes: the Site Design Authority (the Site Chief Engineer); Engineering Programs Administration; Engineering Subject Matter Experts (SMEs) to support facility Projects; ASME program; Annual Assessments; Pressure Safety Program Management; Engineering Procedures Revisions; and CSI Specification preparation.

The Engineering Records activity includes: Design Document Control, Archive of Completed Project Files, CAD Operations and Upgrades, Engineering Information Management, and Engineering Services.

The ISM/IWCP Program administration activity provides the maintenance of the IWCP program documents, associated IWCP revision training, and support to Projects related to the IWCP process.

The Fire Protection Engineering (FPE) activity provides fire protection oversight support for fire hazard analysis, life safety analysis, and coordination with the Site Fire Department. Specific activities such as the Flammable Gas Program are also included.

1.8 HAH – ANALYTICAL LABORATORY MANAGEMENT AND INTEGRATION

The Site's overall oversight and control of analytical laboratory analyses are included in this cost account. The activity provides the coordination of analytical support for waste management, environmental restoration, environmental monitoring, industrial hygiene, facility management, radiological heath, medical monitoring, nuclear material processing and stabilization, and nuclear material control accountability projects. Samples are directed to the appropriate onsite and/or offsite laboratories based on analytical requirements, laboratory capability and capacity,

schedules, data validation requirements, and costs. The cost account includes: Laboratory Management and Integration, Onsite Laboratories, Offsite Laboratories, and Data System Operations and Maintenance.

The Laboratory Management and Integration activity includes: Closure Projects Interface, Radiological Engineering Interface, Quality Assurance of Analytical Data, Analytical Records Management, Data Validation, Laboratory Contractor Oversight and Audits, and Planning for Laboratory Support over Closure Project Life-Cycle.

The Data System Operation activity provides improvements in the data quality for specific projects. The current activity is to improve the soil water database to support Site closure.

1.9 HAJ - RADIATION PROTECTION

The Site's overall programmatic management and direction of the K-H Radiation Protection Program is included in this cost account. Radiological Protection Compliance Oversight, Radiological Health, Radiological Training, Radiological Engineering, Radiological Safety Analytical Services, and Radiological Safety Physics Instrumentation are included.

The Radiological Protection Compliance Oversight activity includes: the revisions to the Radiological Protection Program Plan, Policy, Site Radiological Control Manual, and Implementing Procedure Changes.

The Radiological Health activity includes: Bioassay Sampling, In-Vitro Counting, Intake & Dose Assessment, Internal Dosimetry Program Administration, Routine Whole Body Dosimetry, Nuclear Accident Dosimetry, External Dose Reconstruction, External Dosimetry Program Administration, Radiological Records, and Annual Reports.

The Radiological Training activity provides for the development, delivery, and administration of Radiological Control Technicians (RCTs) requalification and continuing training, monthly briefings for Technical Supervisors and RCTs, including lessons learned, toolbox briefings, and procedure and equipment changes.

The Radiological Engineering activity provides direction, expertise and support to develop, implement, and manage the Site occupational and environmental Radiological protection programs in compliance with applicable laws, regulations, and standards. The activity also provides the management of a sitewide ALARA program.

The Radiological Safety Analytical Services activity collects the costs for personnel monitoring analyses. The Analytical Project Office (in Project H under CAD HAH) maintains oversight of

commercial laboratories and directs which analyses are to be performed by each commercial laboratory.

The Radiological Safety Health Physics Instrumentation activity provides for the operation of the onsite calibration facility, instrumentation evaluation, instrument inventory, and support to laboratories.

1.10 HAK - ENVIRONMENTAL MANAGEMENT AND COMPLIANCE

The Site's overall programmatic management and direction of the Environmental Management and Compliance Program, Regulatory Affairs, Compliance Oversight, and Waste Certification Management are included in this cost account.

The Environmental Management and Compliance Program activity provides for the management systems, tools and resources needed to ensure compliant environmental programs and support RFETS' commitment to Environmental Stewardship. This activity includes personnel resources necessary for program development, management, implementation and strategy development. Environmental program development and implementation oversight during day-to-day operations is also included.

The Regulatory Affairs program provides for compliant implementation of the 11 environmental programs governing RFETS operations. This activity prepares sitewide environmental permit documents and reports, guidance and procedures; and reviews regulatory documents and DOE reports. This activity also includes all agency and permit fees. In general, this activity includes: RCRA, Air and Water Permitting, environmental regulatory review, interpretation and guidance, NEPA management and annual baseline report, Ecology program and monitoring, Pollution Prevention/ Waste Minimization, and Chemical Life Cycle Management.

The Compliance Oversight activity coordinates all environmental inspections, assessments, and audits. Activities included are: interaction with CDPHE, EPA, DOE, and K-H entities; performing oversight of day-to-day operations, programmatic and floor-level environmental assessments to determine compliance status; and providing corrective actions for deficiencies. Oversight of the Environmental Compliance Action Tracking System (ECATS) database to track and trend environmental compliance is also included.

The Waste Certification Management activity provides the certification of low level, low level mixed, TRU and TRU mixed waste to meet accepting facilities waste acceptance criteria. Included in the certification process is checking and verification of required documentation starting with the packaging, radiological measurements, and facility inventories, and includes the verification and qualification of personnel signing documentation over the entire process.

1.11 HAL - ENVIRONMENTAL SYSTEMS AND STEWARDSHIP

The Environmental Systems and Stewardship cost account provides for the direction of all the environmental programs, integration and resolution of sitewide environmental issues, and interface with state, government, and the public on Site environmental topics.

1.12 PROJECT DOCUMENTS AND SYSTEMS

The EES&QP Project is responsible for the maintenance of Site program requirement manuals for safety and environmental programs critical to Project performance. The major EES&QP Project documents include:

- *Radiological Control Manual*
- *Integrated Work Control Program Manual*
- *Conduct of Operations Manual*
- *Nuclear Safety Manual*
- *Criticality Safety Manual*
- *Site Engineering Requirements Manual*
- *Readiness Determination Manual*
- *Safety and Industrial Hygiene Manual*
- *Standards Management Manual*
- *Site Integrated Oversight Manual*
- *Site Quality Assurance Plan*
- *Site Corrective Action Requirements Manual*
- *Site Occurrence Reporting Procedure*
- *Site PAAA Reporting and Process Procedure*
- *Site Root Cause Analysis Manual*
- *Rocky Flats Cleanup Agreement*
- *National Pollutant Discharge Elimination Permit*
- *Training Program Manual*
- *Fire Protection Health and Safety Practices Manual*
- *Radiological Protection Program Plan*
- *Environmental Management Manual*
- *Air Quality Permits*
- *RCRA Permits*
- *National Resource Management Plan (NEPA related)*

These manuals provide Site infrastructure requirements derived from relevant directives in the K-H contract. Implementing procedures are developed from these manuals for the conduct of work at the Site.

The EES&QP Project is responsible for the maintenance of Site systems for safety and environmental activities that are critical to Project performance. The major EES&QP systems include:

- *Site Design Document Control*
- *Engineering Information Management System*
- *Site Design Drafting (CAD system)*
- *Plant Action Tracking System (PATS)*
- *Training, Scheduling, and Records (TSR) System*
- *Medical Records Systems*
- *Radiological Records and Reporting System*
- *OSHA Records and Reporting System*
- *Environmental Action Tracking System (ECATS)*

1.13 Boundaries

The EES&QP Project is not responsible for management or decommissioning of any facilities.

2. BUDGET

The EES&QP Project Baseline Budget is shown in Table 2 on the following page.

Table 2. EES&QP Project Baseline Budget

Burdened Cost ($000)

Project/Cost Account			*F00 Feb-Sep*	*F01*	*F02*	*F03*	*F04*	*F05*	*F06*	*F07*	*Total*
H	**EESH&Q Project**										
	HA	**EES&QP**									
		HAA **Project Management**	1,482	1,891	1,817	1,470	918	924	1,149	0	**9,651**
		HAB **Safety**	4,541	6,176	6,086	4,152	2,806	2,706	2,585	75	**29,127**
		HAC **Quality Assurance**	3,148	6,124	6,374	2,393	1,366	1,696	1,971	0	**23,071**
		HAD **Environmental Media Management**	4,727	7,015	7,000	7,557	7,149	6,813	9,602	1,825	**51,689**
		HAE **Training**	4,073	4,304	4,297	3,124	1,130	671	779	0	**18,378**
		HAF **Nuclear Safety**	2,829	3,274	3,053	1,270	748	706	591	0	**12,472**
		HAG **Engineering**	2,946	3,011	2,339	1,627	1,654	308	293	40	**12,218**
		HAH **Analytical Services**	2,139	3,976	3,280	3,029	2,373	3,219	3,792	348	**22,157**
		HAJ **Radiological Safety**	5,243	6,926	6,935	4,388	3,329	1,504	1,750	20	**30,097**
		HAK **Environmental Mgmt and Compliance**	5,340	5,968	7,645	7,059	5,575	7,444	8,649	0	**47,680**
		HAL **Environmental Systems Stewardship**	69	191	180	146	119	122	205	42	**1,075**
		Project H Totals:	**36,539**	**48,857**	**49,007**	**36,216**	**27,167**	**26,113**	**31,366**	**2,350**	**257,616**

Thursday, June 22, 2000 *rev. 2*

Source: Cost Account Flash Price Spread Report, Kaiser-Hill P&I Reporting System (rpt_fps_ca, Project: BaslDevl_0622a)
FY00 Actuals from P&I Reporting System, FY00 May Database 6/28/00

3. SCHEDULE

A summary of the 371/374 Closure Project Baseline Schedule is shown in Figure 2 on the following page.

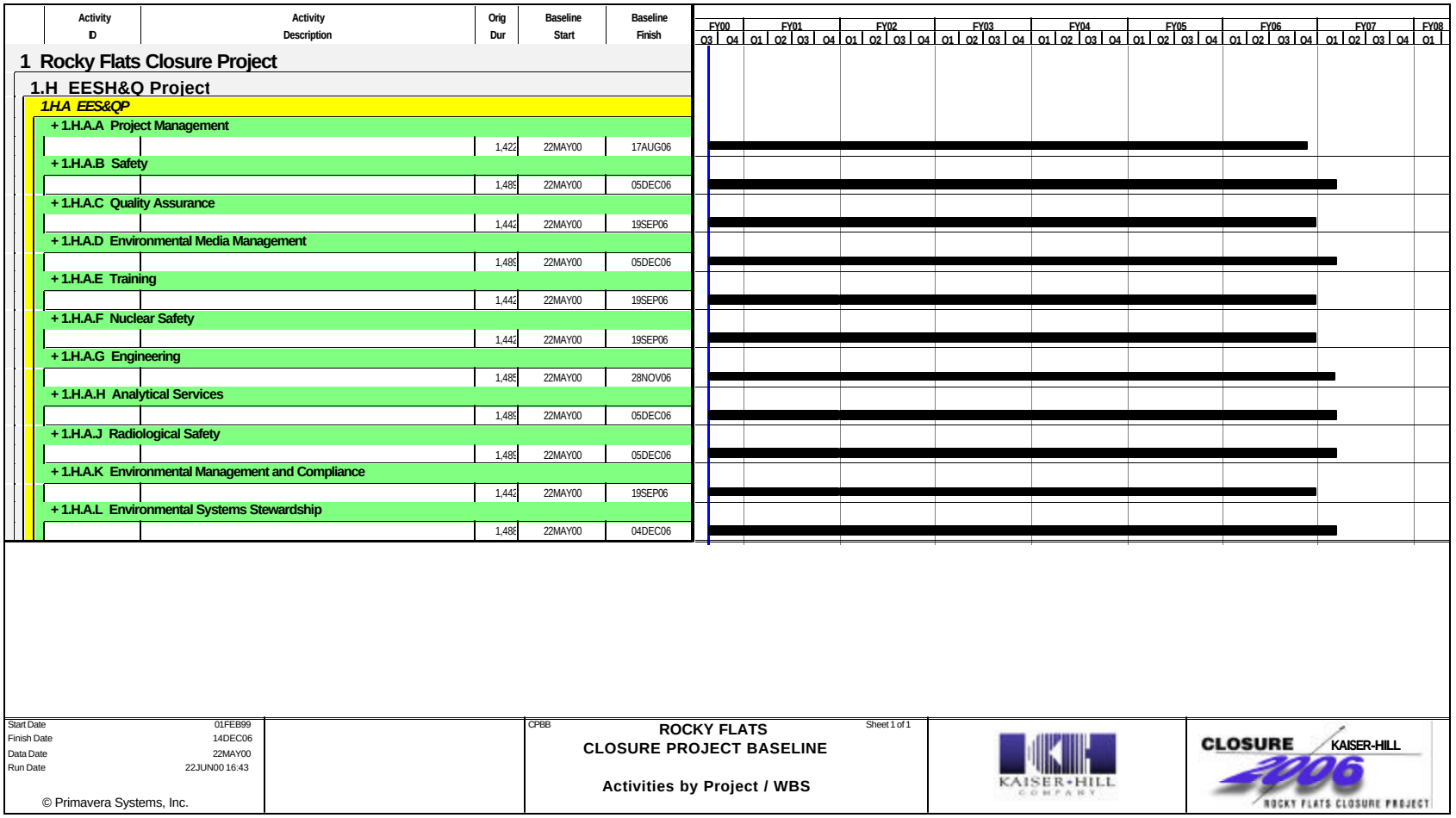

Figure 2: EES&QP Project Baseline Schedule

4. Assumptions

The EES&QP Project has one key assumption: the work scope and schedule are based on the other Projects completing the facility deactivations and shipping the SNM from the Site as scheduled in the Closure Project plan. Some of the supporting functions in EES&QP will be required until Site closure, however, the level of technical manpower has been planned to reduce significantly over time, including organizational consolidations that reduce management and overhead. The budget risk to EES&QP is therefore tied to the schedule risks in the facility closure and shipping schedules in the other Projects. In order to put this budget risk in perspective, a one-year delay in the Projects would result in an approximate $30 million increase in the EES&QP Project life cycle costs. This would be about a 15% increase.

5. Project Organization

Figure 2 is the Organization chart for the EES&QP Project.

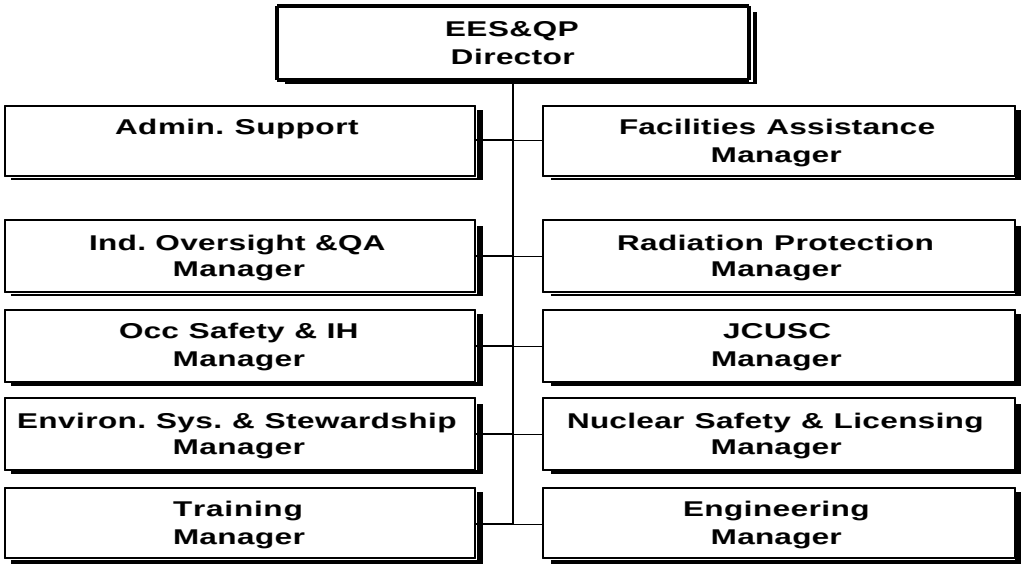

Figure 2. EES&QP Project Organization